Optical preparation and detection of spin coherence in molecules and crystal defects

Lof, Gerrit

DOI:
10.33612/diss.109567350

Acknowledgements

The work presented in this thesis was carried out in the groups Quantum Devices (part of Physics of Nanodevices, FND) and Theoretical Chemistry, at the University of Groningen, the Netherlands, between July 2014 and July 2018. I would like to thank several persons who directly or indirectly contributed to the realization of this work.

First of all I would like to thank Caspar van der Wal, Remco Havenith, Ria Broer-Braam and Maria Loi for giving me the opportunity to work on this versatile project you have set up. I really enjoyed the fruitful collaboration. Thank you for your trust in me, for the guidelines you provided, and for the freedom to carry out the work on my own way. Caspar, thank you for the experience and fun I could have within the group! I admire your personality as much as your professional way of working and your physics intuition. The amount of empathy you display is truly exceptional for a professor. Thank you also for your always flexible attitude. Remco, thank you for always arranging time to provide help or feedback. Your commitment, experience and enthusiasm were indispensable for working out the theoretical part of my PhD. I would also like to heartily thank prof. Koehler, prof. Orrit and prof. Broer-Braam for being my reading committee, thereby making the defence possible.

Also, big thanks to my paranymphs Tom Bosma and Carmem Gilardoni for your involvement in my work. Tom, I really enjoyed the collaboration, social interaction and fun we had in the lab! Your perseverance to solve a problem is truly inspiring. Carmem, it was amazing to see you creating a whole new research track out of my work. Moreover, your enthusiasm and willingness to help were of great value! Olger Zwier, thanks for familiarizing me with all lab tools. Your software legacy was of great use to carry out our experiments. Freddie Hendriks, I enjoyed to profit from your impressive ability to easily become a theoretical and experimental expert in seemingly any topic of physics. I would like to thank the technicians Martijn de Roosz, Johan Holstein, Tom Schouten for their assistance in the lab. Xin Gui, thank you for your interest in my theoretical work and for

your critical review which had a positive effect on the conclusions of Chapter 3. Merlinde Wobben, thank you for your contribution to the calculation of Franck-Condon factors in several metal-organic molecules. I would like to thank all other members of TheoChem and FND for contributing to an enjoyable time and inspiring working place! Over the years I had fruitful discussions with several scientists of which I would like to particularly thank the following persons for their inspiring visions: Hélène Bolvin, Edwin Otten, Alex de Vries, Ria Broer-Braam, Nguyen Tien Son, Ivan Ivanov, Mete Atatüre and Pepijn Pinkse.

Tenslotte wil ik mijn vrienden en (schoon)familie bedanken voor een gezonde dosis afleiding en diepgang in mijn leven die het geheel in balans houden en waardevol maken. In het bijzonder wil ik mijn ouders bedanken voor de basis die zij hebben gelegd middels hun liefde en toewijding. De vrijheid die ik dankzij jullie heb mogen genieten bood ruimte voor de ontplooiing van mijn nieuwsgierigheid die de drijfveer was voor dit werk. Tevens ben ik onmeunig veel dank verschuldigd aan de vrouw van mijn leven. Emmely, jouw liefde was en is van onschatbare waarde. Wat een voorrecht was het telkens op te kunnen laden bij jou tijdens de toch wel pittige jaren van mijn PhD!